

ABSTRACT OF THE DISCLOSURE

APPLICATION-AWARE SYSTEM THAT DYNAMICALLY PARTITIONS AND ALLOCATES RESOURCES ON DEMAND

The present invention is an application-aware method for allocating resources to applications based on a set of predefined policies comprising a Resource Allocation Program (RAP). The RAP is application-aware in that the RAP does not arbitrarily allocate resources to requesting applications. Instead, the RAP allocates resources to requesting applications based on predefined policies. The RAP allows a user to define the resource allocation for each policy in a Resource Allocation Table and associate the applications with the policies in a Policy Application Table. When an application requests resources, the RAP looks to the Policy Allocation Table to determine the policy associated with the application and looks to the Resource Allocation Table to determine the permissible amount of resources to allocate to the application associated with the policy. The RAP then allocates the resources to the requesting application.